# **Watershed Boundary Collaborative Effort**

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# **Public Comments**

No public comments were received for this proposal.

## **Technical Synthesis Panel Review**

## **Proposal Title**

#0321: Watershed Boundary Collaborative Effort

Final Panel Rating
inadequate

## **Technical Synthesis Panel (Primary) Review**

## **TSP Primary Reviewer's Evaluation Summary And Rating:**

The proposed project would produce a standardized watershed boundary dataset for California. Although a potentially useful product, increased scientific understanding is not explicit in the proposal. The cost of the project is extremely high.

#### **Additional Comments:**

The goal/objective of this project is to create a standardized watershed boundary dataset (WBD) for California, by integrating the national Hydrologic Unit Code (HUC) system with the California state CALWATER 2.2.1 system, and to help other agencies make the cross-over to using the new data system, resulting in a coherent use of watershed geospatial data by multiple users, agencies, and institutions. The authors never outline how this project will specifically accomplish CALFED's goals or criteria. It is not clear how the authors plan to "contract" out the 0.55 million dollars, and what these contractors will exactly do to further the goals. In this respect the approach appears only bureacratic in solution to the goal. There is no mention of oversight except for a Contracting Officers Technical Representative. Moreover, there is no specification as to exactly who will be carrying out each step of the work plan. CALFED needs to be aware that this proposal may not generate sufficiently accurate watershed

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#### **Technical Synthesis Panel Review**

boundaries in flatter areas with little topographic relief without additional funding and technical effort. Additionally, this proposal appears to ask CALFED for funding that would complete the data layer for the entire state, including areas that may be outside CALFED's purview.

The proposed project would produce a standardized watershed boundary dataset for California. Although a potentially useful product, increased scientific understanding is not explicit in the proposal. The cost of the project is extremely high.

## **Technical Synthesis Panel (Discussion) Review**

## **TSP Observations, Findings And Recommendations:**

The external reviews of this proposal were varied, but the only review with substantive comments rated the proposal as fair. The products of this proposal will be valuable and the effort to standardize watershed delineation was appreciated by the panel. But, the panel felt the price-tag was extraordinarily high for a project that is not intended to advance scientific understanding or develop new techniques to study problems within the CBDA solution-area.

Rating: Inadequate

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### **Review Form**

#### Goals

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

The goal/objective of this project is 1. to create a standardized watershed boundary dataset (WBD) for California, by integrating the national Hydrologic Unit Code (HUC) system with the California state CALWATER 2.2.1 system, and 2.to help other agencies make the cross-over to using the new data system, resulting in a coherent use of watershed geospatial data by multiple users, agencies, and institutions. Comments The objective is clear and the idea is important, but the authors never outlined how this project will specifically accomplish CALFED's goals or criteria. If the authors had clearly outlined the specifics, there would still be some tension between those specifics and the actual direct effects of the project- much of the project only indirectly relates to CALFED. The proposal is not tailored to this Request For Proposals. Rating fair

#### **Justification**

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full–scale implementation project justified?

Comments Since much of this work is already being done by the authors and their institutions, it is difficult to

understand exactly where the CALFED project funds would be applied in the on-going project. There are vague allusions to the fact that the Bay Area is one of the locations where the funds would be most strenuously applied (the level 6 mapping has not been done in this area yet), but I strongly suspect that much of the funding would actually go to financing the California-wide aspects of the project. The project is timely in that the funding by CALFED would coincide with the work that the authors are already doing, but this project will probably happen with or without CALFED funding. The conceptual model, or how the methodology and its resultant products meet CALFED's goals, is never really specified or detailed.

Rating fair

## Approach

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be useful to decision makers?

Comments The approach is fair in design. It is not clear how the authors plan to "contract" out the 0.55 million dollars, and what these contractors will exactly do to further the goals. In this respect the approach appears only bureacratic in solution to the goal. There is no mention of oversight except for a Contracting Officers Technical Representative, but how do you plan to actually conduct the contracting? Surely, there must be some idea as to who the 0.55 million will be given to...this proposal would be much stronger if the contractor was pre-specified and brought into the proposal...the same can be said for the cross-walking of the agencies...how and who? Moreover, there is no specification as to exactly who will be carrying out each step of

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	the work plan, and this makes the approach
	seem vague.
Rating	fair

## **Feasibility**

Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments	The project is technically feasible with a good likelihood of success. However, it must be said that if for some reason the new watershed boundary dataset does not get certified or finished, then there is no mention as to what will happen with the rest of the project which is still about 1 million dollars. The scale of the project is appropriate and the authors are to be commended for taking on such a wide-ranging topic, with importance to many agencies and institutions, in their previous work.
Rating	good

## **Monitoring**

If applicable, is monitoring appropriately designed (pre-post comparisons; treatment-control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

	The project is geared towards solving a discrepancy between two geospatial datasets and creating one high-resolution dataset, and as such it will meet certain data standards that the authors have outlined, such as the Federal Standards for Delineation of Hydrologic Unit Boundaries, and put within the purview of the Federal Geographic Data Committee. Moreover, the project will meet with other agencies such as the Natural Resource Conservation Service, etc. to make sure that there is some level of oversight into the process. Still, there is no specific protocol that has been outlined in terms of how the new dataset will be
l l	been outlined in terms of how the new dataset will be
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	compared with the old oneshow does the certification process work?
Rating	good

### **Products**

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	The primary product, the new watershed boundary dataset (WBD), will be quite valuable to a large number of agencies and institutions, particularly from a larger data management perspective. The outcome, i.e. the dataset, is likely to be interpretable and usable. Secondary products, such as the cross-walking of agencies to the new data standard, are likely to be quite difficult to measure whether they have worked or not. Inevitably, some users will continue to use old standards. Perhaps, there is some way that the authors can measure this so that the funding agency can have some idea as to success. Overall, the product should be valuable to several groups who work with the Bay, but it's not clear who.
Rating	very good

#### **Additional Comments**

Comments

## **Capabilities**

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments The two primary individuals on the project have successfully conducted similiar projects in the past. They seem particularly

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well-suited and placed to efficiently and effectively implement the project, administratively. They have the infrastructure as well in this respect. However, what will the track record be of the contractor for the 0.55 million? At least, there needs to be some criterion for selection discussed in the proposal. Most of the capabilities that are needed are contracted out- in the future, it would perhaps be more beneficial to find a contractor and specify them and their capabilities. Still, the two primary authors of the proposal seem well-placed and capable for this job.

Rating

very good

### **Budget**

Is the budget reasonable and adequate for the work proposed?

The budget in reasonable and adequate for the work that will need to be done, but it is unreasonable to assign 0.55 million to an unspecified contractor with no discussion as to who or how they will be chosen, what exactly they will do, etc. Futher, the 0.4 million that will be spent on cross-walking the other agencies is not really specified as to what that will **Comments** be composed of. There is a vague mention as to perhaps CALFED's Science Executive Board becoming involved in the awarding of that money in the form of grants to these agencies, but it needs to be further discussed or nailed down solidly for it to feel safe. Most of the money for this project seems to be vaguely tied to vague outcomes and entities. Rating

## Overall

Provide a brief explanation of your summary rating.

Comments	Overall, the proposal is fair. The proposal suffers from a lack of specificity in several ways. First, how does this project relate specifically to CALFED's goals in this Request for Preposals? Second, how will over half of the budget be spent, in terms of the specifics of contracting? Third, how will oversight be done for the contracting and in what way will the cross-walk grants be distributed? Finally, the proposal also seems that it has not be tailored to this RFP well-enough, it has a few grammatical errors in it, and it has the same paragraphs copy and pasted into multiple different sections making for repetitive reading.
Rating	fair

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### **Review Form**

#### **Goals**

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

Comments	The authors have done a fine job of describing	
	Comments	the goals of this project. The work that they describe is very important to both CALFED and
	the State of California as a whole.	
	Rating	excellent

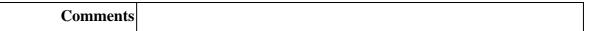
#### **Justification**

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full–scale implementation project justified?

Comments	This proposal would extend work that has been in progress for several years. The model for acquiring and maintaining the data is clearly stated and justified for CALFED.
Rating	excellent

## **Approach**

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be useful to decision makers?



	If successful, this work would create a data set of great value to CALFED. Many of CALFED's ongoing work, as well as recommendations and outcomes, are likely to be tied to individual watersheds, which this work propses to delineate.
Rating	excellent

## **Feasibility**

Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments	The authors have noted repeatedly in their proposal that additional work beyond that proposed here may still be required to delineate watersheds of low relief. Such geographically flat areas fall within smuch of CALFED's area of interest. It is therefore possible that CALFED would still not have adequate watershed boundary delineations at the completion of this project. Thus, the likelihood of success for flat lowlands may not be met by this project.
Rating	fair

## **Monitoring**

If applicable, is monitoring appropriately designed (pre–post comparisons; treatment–control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

Comments	The proposal describes procedures for monitoring and maintaining the data into the future, including the establishment of a data steward.
Rating	excellent

#### **Products**

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	The proposed watershed boundary data set would be extremely valuable at many levels to CALFED. The authors have made a compelling case for its acquisition. However, as noted in the Feasibility section above, there is still the outstanding question of the project's ability to acquire acceptably accurate watershed boundaries in flat areas with little topographic relief.
Rating	good

#### **Additional Comments**

Comments

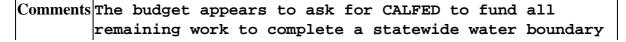
## **Capabilities**

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments	From a technical perspective, the authors are very knowledgeable in this area. The group has a long institutional track record with this data layer for California. This should bode well for the success of their proposal.
Rating	excellent

## **Budget**

Is the budget reasonable and adequate for the work proposed?



	data set. However, a good portion of the remaining work to be completed is in watersheds outside of
	CALFED's area of interest. Perhaps CALFED should only
	fund a pro rata portion of the amount requested for
	those watersheds within CALFED's geographic scope.
Rating	fair

## Overall

Provide a brief explanation of your summary rating.

	This project proposes the acquisition of a statewide watershed boundary data layer. Such a data set would be of tremendous use to CALFED, both now and into the future.
Comments	However, CALFED needs to be aware that this proposal may not generate sufficiently accurate watershed boundaries in flatter areas with little topographic relief without additional funding and technical effort. Additionally, this proposal appears to ask CALFED for funding that would complete the data layer for the entire state, including areas that may be outside CALFED's purview.
Rating	good

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## **Review Form**

### Goals

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

Comments	This proposal is clearly written. Each task is outlined and the supporting text tells the story that California is having a difficult time combining its watershed information with information from nationally accepted watershed delineations. The ideas are consistent throughout the text.
Rating	very good

### **Justification**

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full–scale implementation project justified?

Comments	This proposal builds on work this group has already begun. To date their efforts have brought together a wide range of federal, state, and local organizations. They have completed 45% of their goal and are asking for funding to complete and then maintain a statewide watershed boundary. If funded, this project can act as a model for other states.
Rating	very good

## **Approach**

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be useful to decision makers?

The proposal is broken into six tasks which are clearly outlined. Task A: Completion of a certified WBD for the state of California - The main goals here are to compile data and then hire a contractor that will asemble all of the work done to date. The contractor will be chosen if they have a "proven track record" and if they meet federal standards. I would like to have seen more detail here and more planning. Who are the possible contractors? How do you Comments distinguish who has the best record? More detail would provide more confidence that this is well thought out and organized proposal. Task b- Idenitifcation of a dataset steward: to be "integrated with and after Task b." - This must be a typo as this is task b so I am assuming it will be integrated with Task a, which is logical. Everything under task b appears reasonable and necessary. The remaining Tasks are clearly written. Overall - the approach appears reasonable and certainly the end product would be useful for California and for other states. Rating good

## **Feasibility**

Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments This is a large project with a broad scope. But the team clearly has a committment to this type of work and many years of experience. Further, they have completed much of this work already without the help of a large grant which suggests that this team is goal

	orientated and willing to work until completion on this project.
Rating	very good

## **Monitoring**

If applicable, is monitoring appropriately designed (pre-post comparisons; treatment-control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

Comments	If implemented the WBD for California would be a self-propagating system in the sense that as if it is useful more and more groups will use it.
Rating	very good

#### **Products**

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	This proposal is valuable to California. If a common watershed delineation method can be implemented successfully then it will act as a model for other states. Certainly, ecologists, hydrologists, biologists, etc. will all be able to reap the benefits from this work.
Rating	excellent

### **Additional Comments**

While the proposal is well written and consistent the Comments Figures are poor and should be reworked for future projects.

## **Capabilities**

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments	The record of the proposal writers and their assembled team is a perfect match for this project. As stated earlier, the significant work they have completed towards a WBD for California on a limited budget and with limited staff speaks highly of their ability and their commitment to this project.
Rating	excellent

## **Budget**

Is the budget reasonable and adequate for the work proposed?

Comments	The budget appears to be very reasonable and well planned.
	very good

### **Overall**

Provide a brief explanation of your summary rating.

	Overall, "Watershed Boundary Collaborative Effort" is a well thought out and timely planned project. I would
Comments recommend funding this proposal for the full t years and think that it could provide a valuable long overdue, model for other states.	
Rating	very good